

CLAIM AMENDMENTS:

Please amend Claim 30 as follows:

1.-29. (Canceled)

30. (Currently Amended) A color image pickup device formed on a single semiconductor chip comprising:

an image pickup element, including a two-dimensional array of photodetectors each ~~with~~ having a respective color filter, and a reading circuit for ~~randomly sequentially~~ accessing basic block units each comprising at least a two by two array of the photodetectors in said two-dimensional array, to read out analog image data from the basic block units, ~~each block unit comprising at least a two by two array of photodetectors;~~

a block storage circuit ~~to store~~ for storing analog image data sent in parallel by the reading circuit from a target basic block unit of the photodetectors, and from the basic block units of photodetectors neighboring the target basic block unit, wherein the number of stored analog image data bits is smaller than the number of photodetectors included in the image pickup element; ~~and~~

an interpolation circuit, which is operable upon the analog image data stored in said block storage ~~means~~ circuit, to perform interpolation for each one of the photodetectors of the target basic block on the basis of the stored analog image data read out from adjacent photodetectors having color filters of the same respective colors, wherein

after a termination of the interpolation for each of the photodetectors of the target basic block unit, in order to perform the interpolation for the next target basic block unit, the block storage circuit performs the storing of the analog image data to replace the analog image data of the basic block units of the photodetectors neighboring the target basic block unit with the analog image data of other basic block units of the photodetectors neighboring the next target basic block unit; and

a signal processing circuit for receiving analog image data outputted from the interpolation circuit, ~~and~~ for subjecting the analog image data to a processing of at least one of color gain adjustment, low-frequency filtering, and edge enhancement, and for outputting processed analog image data as the output of the color image pickup device,

wherein the block storage circuit, the interpolation circuit, and the signal processing circuit are formed on one semiconductor chip together with the image pickup element.

31. (Previously Presented) A device according to Claim 30, wherein each basic block unit is formed of 2x2 photodetectors.

32. (Previously Presented) A device according to Claim 31, wherein said color filters are of color red, green, and blue, respectively, and each basic block unit is a 2x2 block of a Bayer matrix.

33. (Previously Presented) A device according to Claim 31, wherein said color filters are of color Cyan, Magenta, Yellow, and Green and each basic block unit is a 2x2 block partition of the basis 4x2 pattern of a complementary color filter array.

34. (Previously Presented) A device according to Claim 31, wherein said block storage means stores image data of 3x3 basis block units.

35. (Cancelled)

36. (Cancelled)